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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,893	08/28/2003	Andreas Schell	706716US1	8717

24938 7590 02/03/2006

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EXAMINER

LANGEL, WAYNE A

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Art Unit: 1754

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 10 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petillo et al in view of Taschek, for the reasons given in the last Office Action.

Claims 3-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petillo et al in view of Taschek as applied to claims 1, 2, 10 and 19-21 above, and further in view of Kojima et al, even further in view of Perry's Chemical Engineers' Handbook, for the reasons given in the last Office Action.

Applicants' argument, that neither Petillo et al nor Taschek teaches "providing a source of heat arranged to vaporize a source of water into steam", is not convincing. It would be obvious from Taschek to modify the process of Petillo et al by mixing steam, rather than water, with the sodium borohydride in mixing step 504, since Taschek establishes the equivalence between water and water vapor for reacting with metal hydrides to form hydrogen at col. 1, lines 33-54. Since it would be obvious to mix steam, rather than water, with the sodium borohydride in mixing step 504 of Petillo et al, it would be further obvious to provide a heat source arranged to vaporize a source of water into a source of steam in the process, since it is well-known that heat is required to convert water into steam. There is no evidence on record of unexpected results which

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would emanate from the use of steam, rather than water, as a reactant in the process of Petillo et al.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 15 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 15, there is no "description support" in the original specification for employing a "single chamber coated with a catalyst" as the mixing device and catalytic hydrogen generating chamber. In claim 18, there is no "description support" in the original specification for the recited arrangement of contact between the steam and metal hydride source in the mixing device.

Claims 16 and 17 are objected to as based on a rejected parent claim, and would be allowed if written in independent form.

Claims 11 and 22 are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Langel whose telephone number is 571-272-1353. The examiner can normally be reached on Monday through Friday, 8 am - 3:30 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Wayne Langel
Primary Examiner
Art Unit 1754
